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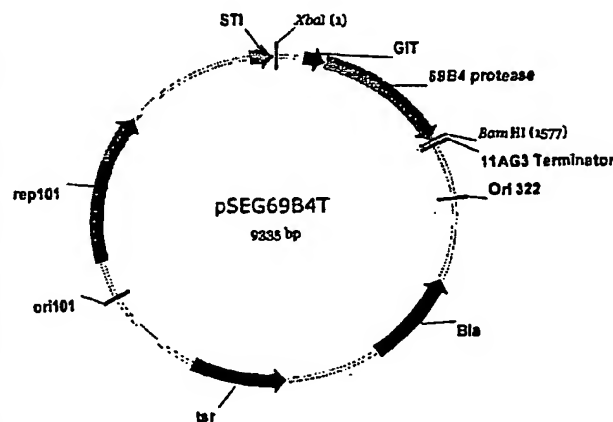
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(54) Title: SERINE PROTEASES, NUCLEIC ACIDS ENCODING SERINE ENZYMES AND VECTORS AND HOST CELLS INCORPORATING SAME



(57) Abstract: The present invention provides novel serine proteases, novel genetic material encoding these enzymes, and proteolytic proteins obtained from Micrococcineae spp., including but not limited to Cellulomonas spp. and variant proteins developed therefrom. In particular, the present invention provides protease compositions obtained from a Cellulomonas spp, DNA encoding the protease, vectors comprising the DNA encoding the protease, host cells transformed with the vector DNA, and an enzyme produced by the host cells. The present invention also provides cleaning compositions (e.g., detergent compositions), animal feed compositions, and textile and leather processing compositions comprising protease(s) obtained from a Micrococcineae spp., including but not limited to Cellulomonas spp. In alternative embodiments, the present invention provides mutant (i.e., variant) proteases derived from the wild-type proteases described herein. These mutant proteases also find use in numerous applications.

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